# OCT 1 2 2006

Doc Code: AP.PRE.REQ

PTO/SB/33 (07-05)
Approved for use through xx/xx/200x, OMB 0551-00xx
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respo	TID TO A COLECTION	·	
PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)	
		3740.US.P	
	•		•
I hereby certify that this correspondence is being deposited with the	Application Number		Filed
United States Postal Service with sufficient postage as first class mail	10/016,597		10/26/2001
in an envelope addressed to "Mall Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" (37 CFR 1.8(a))	10/010,5	997	10.20.2001
1 atents, P.O. Box 1450, Advantage, VA 22010-1450 (5) OFTA 1.0(a))			
on	First Named Inventor		
Signature	Curtis W. HEISEY		
Signature			
	Art Unit	Ex	aminer
Typed or printed Richard A. BAKER, Jr.	2192		Eric B. KI\$\$
name			
This request is being filed with a notice of appeal.  The review is requested for the reason(s) stated on the attached sheet(s).  Note: No more than five (5) pages may be provided.			
I am the			
applicant/inventor.		r 8	0
application vertor.	<u> </u>	Sk	nature
assignee of record of the entire interest.	Richard A. BAKER, Jr.		
See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	Typed or printed name		
	• • •		
X attorney or agent of record. 48,124		1-508-0	323-1085
Registration number	Telephone number		
		•	ric randy
attomey or agent acting under 37 CFR 1.34.	October 12, 2006		
Registration number if acting under 37 CFR 1.34			Date
		•	= =-=
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required.			
Submit multiple forms if more than one signature is required, see below.			
*Total of forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or rotain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the Individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need essistance in completing the form, call 1-800-PTO-9199 and select option 2.

# OCT 1 2 2006

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:

Curtis HEISEY, et al.

**Docket No:** 

3740.US.P

**Serial Number: 10/016,597** 

Group Art Unit: 2192

Filed:

October 26, 2001

Examiner:

Eric KISS

Re:

Intelligent Device Upgrade Engine

October 12, 2006

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

#### PRE-APPEAL BRIEF

Dear Sir:

The Applicants hereby submit the reasons for our concurrently filed Pre-Appeal Request for Review to the United States Patent and Trademark Office. This Pre-Appeal Brief is in response to the final Office Action mailed October 6, 2006. Concurrent with the filing of this Pre-Appeal Brief is a Notice of Appeal (Form SB/31) and a Pre-Appeal Brief Request for Review (Form SB/33).

Claims 1 to 37 are pending in this application. Claims 1, 10, 18, 19, 20, and 33 are independent.

Claims 1-17 and 19 stand rejected by the Examiner under 35 U.S.C. § 102(e) in view of U.S. Patent Application No. 2003/0126195, filed by Daniel A. Reynolds et al. on April 10, 2001 (hereinafter, "Reynolds"). Claim 18 stands rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Reynolds in view of U.S. Patent No. 6,549,943, issued to Maximilian Spring et al. on April 15, 2003 (hereinafter, "Spring"). Claims 20-37 stand rejected by the Examiner under 35 U.S.C. § 103(a) as being unpatentable over Reynolds in view of U.S. Patent Application No. 2001/0055017, filed by Bas Ording et al. on January 5, 2001 (hereinafter, "Ording").

U.S. Pat. Ser. No. 10/016,597 October 12, 2006 Page 2 of 5

Applicant's arguments in response to the shortcomings of the teachings of Reynolds have been articulated in three previous responses to office actions, all of which are incorporated herein by reference.

For simplicity of this Pre-Appeal Brief, only claims 1-19 are addressed. Claims 20-38 remain pending and will be addressed separately.

### A. The Claims

The application covers a system for replacing a code image in an embedded device. In the system tool, a control program responds to a user command received through a user interface by issuing device commands in order to replace a code image within the embedded device. A monitoring program, operating asynchronously with respect to the control program, generates event indications in response to detecting changes in one or more attribute within the embedded device. The monitoring program forwards the event indications to the control program.

Independent claims 1, 10, 18 and 19 recite, either word for word or with similar language, "...monitoring program code, asynchronous with respect to said control program code, for generating at least one event indication in response to a change of at least one predetermined attribute of said embedded device and forwarding said at least one event indication to said control program code...".

This recitation requires a change of an attribute in the embedded device to be detected by a monitoring program. The attribute must be in the embedded device, and must be predetermined.

## B. Reynolds

Reynolds teaches that "[a] common command interface (CCI) provides an interface abstraction allowing network device applications to maintain one set of code for each command regardless of which command interface (e.g., web, CLI, NMS, etc.) initiates the command.... The interface abstraction allows new applications including additional commands to be added to a network device and existing applications to be dynamically upgraded to include new and/or modified commands without having to modify the CCI." (Reynolds, Abstract). Within Reynolds, there are several paragraphs ([0504] through [0506]) that describe downloading firmware from a directory into an embedded device.

U.S. Pat. Ser. No. 10/016,597 October 12, 2006 Page 3 of 5

However, there are no teachings in Reynolds of a monitoring program doing anything in response to a change in an attribute of the embedded device. See Reynolds at paragraphs [0504] through [0506], as cited in the office action.

[0504] Master SMS 184 periodically polls installation directory 1222 for new sub-directories including new

releases, for example, release 1.1 1218 in sub-directory 1220. When the master SMS detects a new release, it opens (and decompresses, if necessary) the packaging list in the new sub-directory and verifies that each software component listed in the packaging list is also stored in the new sub-directory. The master SMS then performs a checksum on each software component and compares the generated checksum to the checksum appended to the software component.

[0505] Once all software components are verified, the master SMS opens (and decompresses, if necessary) an upgrade instruction file also included as one of the software components loaded into sub-directory 1220 from the Installation Kit. The upgrade instruction file indicates the scope of the upgrade (i.e., upgrade mode). For instance, the upgrade instruction file may indicate that the upgrade may be hot or cold or must only be cold. The upgrade instruction file may also indicate that the upgrade may be done only across the entire chassis—that is, all applications to be upgraded must he upgraded simultaneously across the entire chassis—or that the upgrade may be done on a board-by-board basis or a path-by-path basis or some other partial chassis upgrade. A hoard-by-board upgrade may allow a network device administrator to chose certain boards on which to upgrade applications and allow older versions of the same applications to continue running on other boards. Similarly, pathby-path or other service related upgrades may allow the network administrator to chose to upgrade only the applications controlling particular services for particular customers, for example, a single path, while allowing older versions of the applications to continue to control the other services. Various upgrade modes are possible.

[0506] The upgrade instructions file may also include more detailed instructions such as the order in which each software component should be upgraded. That is, if several applications are to be upgraded, certain ones may need to be upgraded before certain other ones. Similarly, certain software components may need to be upgraded simultaneously. Moreover, certain boards may need to be upgraded prior to other boards. For example, control processor card 12 may need to be upgraded prior to upgrading any line cards.

U.S. Pat. Ser. No. 10/016,597 October 12, 2006 Page 4 of 5

Nothing is done to monitor the board's (compare to Applicants "embedded device") attributes; all actions are taken by the Master SMS. Paragraph [0504] does do polling, but it polls the installation directory, not the embedded device.

## C. The Examiner's Argument

In the most recent office action, the Examiner responds to the applicant's arguments with

The examiner maintains that the availability of upgrades, along with the board specific upgrade instructions (paragraphs [0505] and [0506]) may be considered attributes of the embedded device in accordance with the monitoring program code of claim 1. The master SMS As such, the Examiner considers the addition of a download file into a directory on the SMS to be a change in the attributes of the embedded device.

# D. Predetermined Attribute of Embedded Device Element Missing

The problem with the Examiner's logic is that the attributes in Reynolds are attributes of the SMS server, and not attributes of the embedded device. The language in the claim, "...a change of at least one predetermined attribute of said embedded device...", clearly indicates that the change is occurring in the embedded device. The attribute is "of said embedded device" and not simply something associated with the embedded device.

Reynolds' download files are generic, and Reynolds describes that they may be downloaded to any of the devices. They are not specific to the embedded device, but are separate from the device and are changed independently of the embedded device. They are not attributes of the embedded device.

Furthermore, these files are not predetermined. The files in Reynolds arrive asynchronously and will be unique. There is nothing predetermined about the files to download.

Therefore, the Reynolds' files are not "...predetermined attributes of said embedded device..."

OCT 1 2 2006

U.S. Pat. Ser. No. 10/016,597 October 12, 2006 Page 5 of 5

This element is simply missing from the teachings of Reynolds, and claims 1, 10, 18 and 19 are not anticipated. The rejection under 35 U.S.C. § 102(e) is clearly in error and must be withdrawn.

# E. Dependent Claims

Claims 2-9 and 11-17 depend upon depend upon claim 1 or 10 and are therefore distinct from Reynolds for the above reasons.

#### CONCLUSION

The pending claims define subject matter that is distinct from both Reynolds. Claims 1-19 are pending and in condition for allowance. Applicants respectfully request prompt issuance of this application.

The commissioner is authorized to charge deposit account 503650 for any fees associated herein.

Respectfully submitted

Richard A. Baker, Jr. Registration No. 48, 124 3COM CORPORATION

350 Campus Drive

Marlborough, MA 01752 Telephone: 508-323-1085

Certificate of Mailing/Transmission (37 CFR 1.8)

I hereby certify that this correspondence is, on the date shown below, being:

Mailing

D deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313.

Facsimile

☑ transmitted by facsimile to the Patern and Trademark.

Office to telephone number 1-571-273-8300

Richard A. Baker, Jr., Reg. No. 48,124

Date: October 12, 2006